

ABSTRACT

An apparatus and method for detection and monitoring of autonomic nervous system (ANS) activity in humans, primarily in the field of sleep research. The present invention discloses a portable, simple, and cost-effective electronic device containing hardware and software that permits real-time monitoring of a pulsatile blood volume waveform obtained through use of a photoplethysmographic (optical volume detecting) probe, thereby allowing signal conditioning, waveform slope analysis, display, recording, and output of pulse transitional slope data representative of activity in the ANS.